Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands	)	WT Docket No. 12-70
	)	
Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.6 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz	)	ET Docket No. 10-142
	)	
Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands	)	WT Docket No. 04-356

COMMENTS OF IRIDIUM SATELLITE LLC

Iridium Satellite LLC ("Iridium") hereby submits its comments in response to the Federal Communication Commission's ("Commission") Notice of Proposed Rulemaking and Notice of Inquiry in the above-captioned proceedings ("*2 GHz MSS/AWS-4 NPRM*").[1] Iridium supports the Commission's decision to exclude the Big LEO Mobile Satellite Service ("MSS") band (1610-1626.5 MHz/2483.5-2500 MHz) from the proposals in the *2 GHz MSS/AWS-4 NPRM*.

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[1] *In the Matter of Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands; Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.6 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz; Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands,* Notice of Proposed Rulemaking and Notice of Inquiry, WT Docket No. 12-70, ET Docket No. 10-142, WT Docket No. 04-356, FCC 12-32 (rel. Mar. 21, 2012) ("*2 GHz MSS/AWS-4 NPRM*").

Any regulatory changes to the 2 GHz MSS band (2000-2020 MHz/2180-2200 MHz) in the above-captioned proceeding will be based on the particular circumstances and record developed with respect to that band. Extending similar changes to other MSS bands would not be appropriate at this time, given the significant differences between the bands. Furthermore, in light of the crucial public safety, government, and commercial operations that rely upon robust satellite services in the Big LEO band, the Commission should reject any suggestions that terrestrial operations should be expanded in the Big LEO MSS band and ensure that the band is preserved for satellite use.

I. THE SIGNIFICANT DIFFERENCES BETWEEN THE 2 GHZ AND BIG LEO MSS BANDS SHOW THAT THE COMMISSION IS CORRECT TO LIMIT ITS PROPOSALS TO 2 GHZ.

Given the significant differences that exist between the 2 GHz and Big LEO MSS bands, Iridium supports the Commission's band-specific approach in the *2 GHz MSS/AWS-4 NPRM*. As the Commission recognized in the Notice of Proposed Rulemaking, a band-specific approach is appropriate here because "each MSS band is differently situated" and has unique characteristics.[2] Key distinctions between the 2 GHz MSS band and the Big LEO MSS band include past and current volume of use, spectral positions, and band configuration. In light of these differences, the Commission is correct to limit its proposals to the 2 GHz MSS band in the *2 GHz MSS/AWS-4 NPRM*.

While the 2 GHz band has been largely unused since its original allocation, the Big LEO band sees robust satellite use in the United States and around the world. Of the two legacy 2 GHz providers, DBSD and TerreStar, only one has offered commercial service, and even this

[2] *2 GHz MSS/AWS-4 NPRM*, ¶ 2 ("[E]ach MSS band is differently situated and therefore merits a band-specific approach to the expansion of terrestrial use. . . . Due to the unique characteristics of each band, we intend to address the Commission's Ancillary Terrestrial Component (ATC) rules for Big LEO and L-band MSS separately.").

offering was limited in scope.[3] In contrast, Iridium makes robust and varied use of Big LEO MSS spectrum to deliver service to public safety, government, and commercial MSS entities.[4]

II. THE COMMISSION SHOULD PRESERVE THE BIG LEO MSS BAND FOR SATELLITE USE DUE TO EXISTING AND IMPORTANT PUBLIC SAFETY, GOVERNMENT AND OTHER CRITICAL USES .

Given the important public safety, government, commercial and other critical functions dependent on Big LEO spectrum, the Commission should ensure that the Big LEO MSS band is preserved for satellite operations. Iridium's use of the Big LEO band not only represents one of the true MSS success stories, but its success has had a wide-ranging impact on numerous industries and governments all over the world. Through its commercial satellite constellation, the largest in the world, Iridium is able to deliver communication services to first responders, public safety personnel, the military, border security officers, the aviation industry, and the energy sector in addition to essential backup communications across urban and rural areas alike. And demand for Iridium's service will only continue to grow. Thus, the Commission should preserve the Big LEO MSS band for satellite use.

Iridium provides a wide array of communication services critical to public safety in the Big LEO MSS band. Iridium has played a vital role during national and international disasters. In the United States, Iridium delivered communications service to first responders at the local, state and federal level following Hurricanes Katrina and Rita.[5] After the earthquakes in Haiti and Chile, governments and aid organizations relied on Iridium handsets and equipment to

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[3] *Id.*, ¶ 8 ("Despite having MSS and MSS/ATC authority and an orbiting satellite, DBSD has yet to offer either commercial service or terrestrial service and TerreStar has offered a small amount of satellite service . . . To date there remains little commercial use of [2 GHz] spectrum for MSS and none for terrestrial (ATC) service.") (internal citations omitted).

[4] *See* Section II, *infra*.

[5] Iridium Comments at 3, PS Docket No. 11-60, PS Docket No. 10-92, EB Docket No. 06-119 (July 7, 2011).

coordinate relief and rescue efforts.[6] And following the 2011 earthquake and tsunami in Japan, Iridium assisted in reestablishing domestic and international communications by activating Iridium systems already in place and delivering thousands of new satellite handsets.[7] Iridium's service has also proved critical to disaster preparation, not just disaster response. For example, since 2003, the U.S. National Oceanic and Atmosphere Administration has relied on Iridium to operate its tsunami warning system, including during and after the 2011 Japanese tsunami.[8]

Iridium's emphasis on innovation ensures subscribers have the latest cutting-edge technology in emergency response. Iridium currently provides critical backup and support services to MedSTAR Health with satellite phones and airtime for MedSTAR Health's facilities in the Washington, DC region, enabling existing systems to be used even when traditional phone service is unavailable. Iridium's automated tracking and voice services were also installed in MedSTAR Health's transport helicopter fleet, enabling MedSTAR Health to view the location and status of its fleet and allow its helicopters to communicate with hospitals. Iridium's satellite communications network was also deployed in innovative ways to assist in the cleanup and recovery effort after the April 2010 explosion of the Deepwater Horizon oil rig and the subsequent oil spill in the Gulf of Mexico. By incorporating Iridium satellite transceivers into robots and buoys that can be deployed on site, researchers and other relief workers were able to monitor and track the movements of the oil spill in real time, greatly improving the efficiency of cleanup efforts.

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6 *Id.*, 5.

7 *Id.*, 4-5.

8 *Id.*, 3.

Iridium's effectiveness is borne out by its growing subscribership: demand for Iridium's service has increased and will only continue to grow. Last year, Iridium surpassed 500,000 subscribers worldwide and has enjoyed more than 25 percent growth in subscribership every year for the last five years.[9] Iridium's first-quarter 2012 results affirmed its outlook for continued growth, with subscribership up by 22 percent.[10] Prospects for sustained growth are healthy. Iridium's new Iridium Force initiative will spur increased innovation in the mobile industry through the partnering and licensing of Iridium's core technologies and network.[11] Moreover, Iridium's NEXT system will bring new, even more advanced services to its subscribers.[12] These greater-bandwidth, next-generation services are eagerly anticipated by Iridium's customers, and are certain to promote substantial additional usage of Iridium's network and spectrum resources.

As shown by Iridium's activity in the band, Big LEO MSS spectrum sees robust use for public safety, government, commercial and other functions today, and is poised to see even expanded use in the future. Iridium is actively using all of its spectrum resources and expects to

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[9] Press Release, Iridium, *Iridium Surpasses 500,000 Subscribers Worldwide* (Sept. 12, 2011), http://investor.iridium.com/releasedetail.cfm?ReleaseID=604474.

[10] Press Release, Iridium, *Iridium Announces First-Quarter 2012 Results; Company Expands Subscribers 22% and Affirms 2012 Outlook for Continued Growth* (May 3, 2012), http://investor.iridium.com/releasedetail.cfm?releaseid=669960.

[11] Under Iridium Force, Iridium has opened and licensed its core technologies and network to extend its communications reach. For example, Wi-Fi products and services launched last year allow Blackberry, Android, iPhone, iPad and laptop users to connect to their devices to the Iridium network when using particular models of Iridium handsets. Press Release, Iridium, *Iridium Force™ - A New Vision for Global Communications - Designed to Enhance and Expand the Way People and Organizations Connect Everywhere* (Sept. 7, 2011), http://investor.iridium.com/releasedetail.cfm?releaseid=609735.

[12] Anticipated to launch in 2015, Iridium NEXT builds on Iridium's existing constellation architecture to enhance and extend mobile communication services. Press Release, Iridium, *Iridium NEXT Constellation Passes Critical Milestones; On Schedule for Planned Launch in 2015* (Mar. 12, 2012), http://investor.iridium.com/releasedetail.cfm?releaseid=656450.

continue doing so, given the growing demand for Iridium's service. In light of the public safety, government, commercial and other critical services dependent on the Big LEO MSS spectrum, the Commission should ensure the band is preserved and protected for satellite use.

III. CONCLUSION

Iridium supports the Commission's decision to exclude Big LEO spectrum from proposals in the *2 GHz MSS/AWS-4 NPRM*. A band-specific approach is appropriate for the above-captioned proceedings due to the significant differences between the 2 GHz and Big LEO MSS bands. In future proceedings, the Commission should ensure that the Big LEO band is preserved for satellite use and reject any suggestions that terrestrial operations should be expanded in the band.

Respectfully submitted,

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